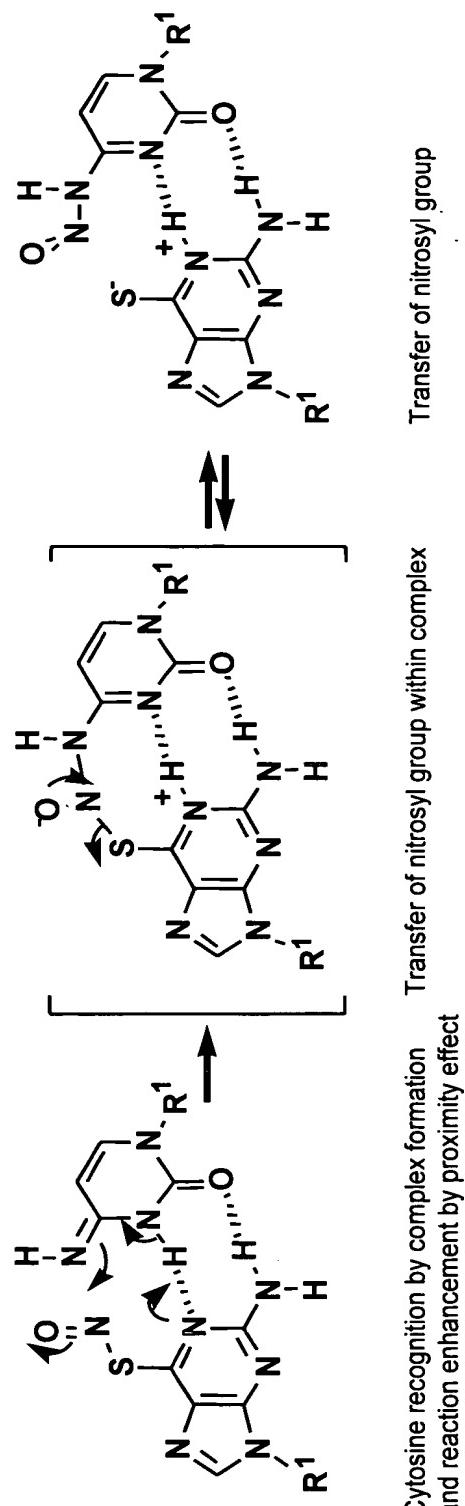


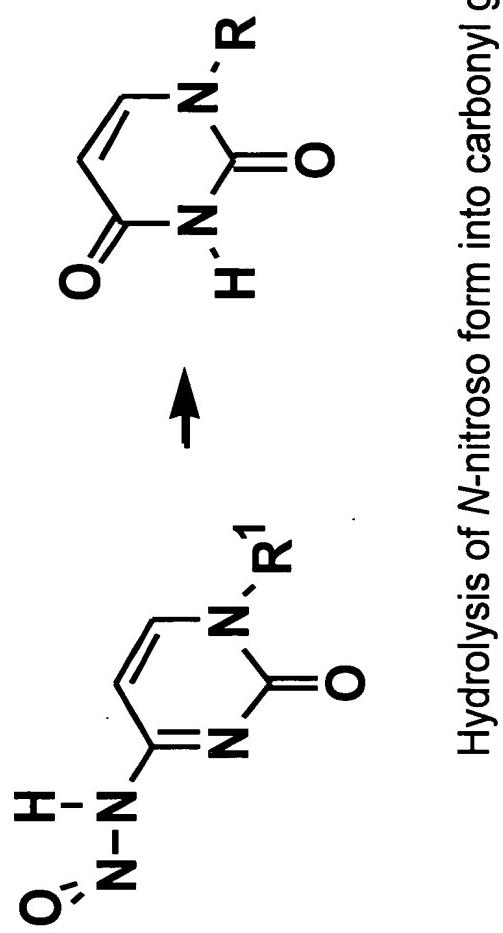
Figure 1



Cytosine recognition by complex formation and reaction enhancement by proximity effect

Transfer of nitroso group

Figure 2



Hydrolysis of *N*-nitroso form into carbonyl group

Figure 3

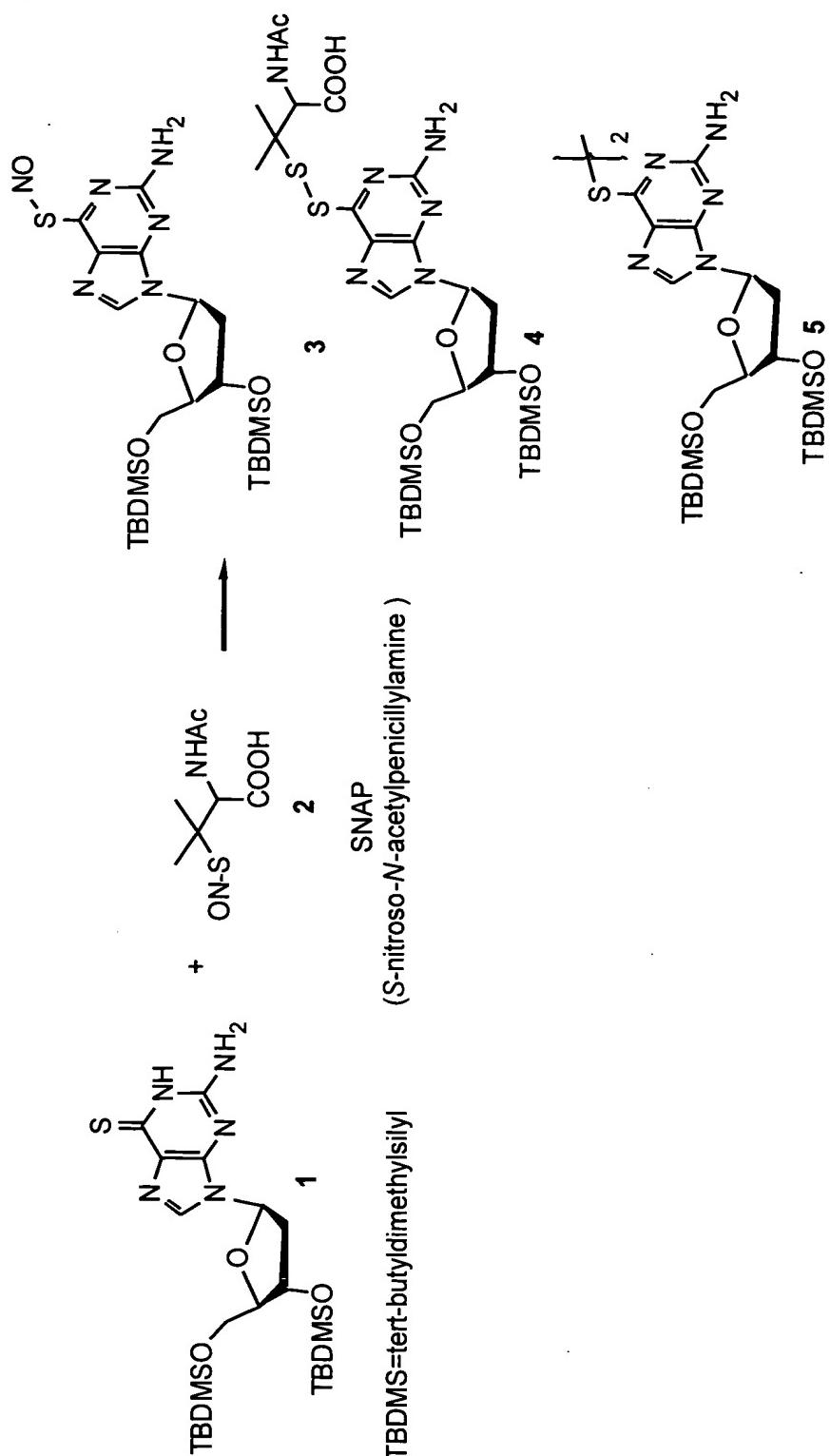


Figure 4

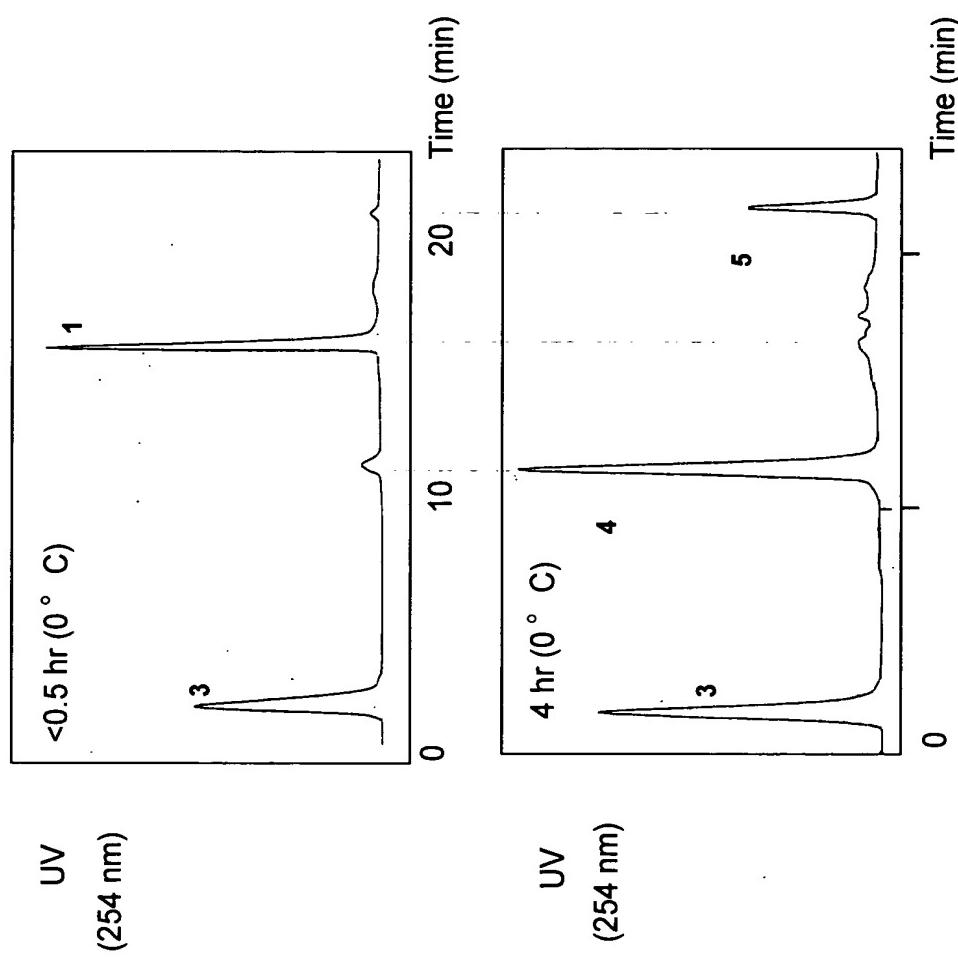


Figure 5

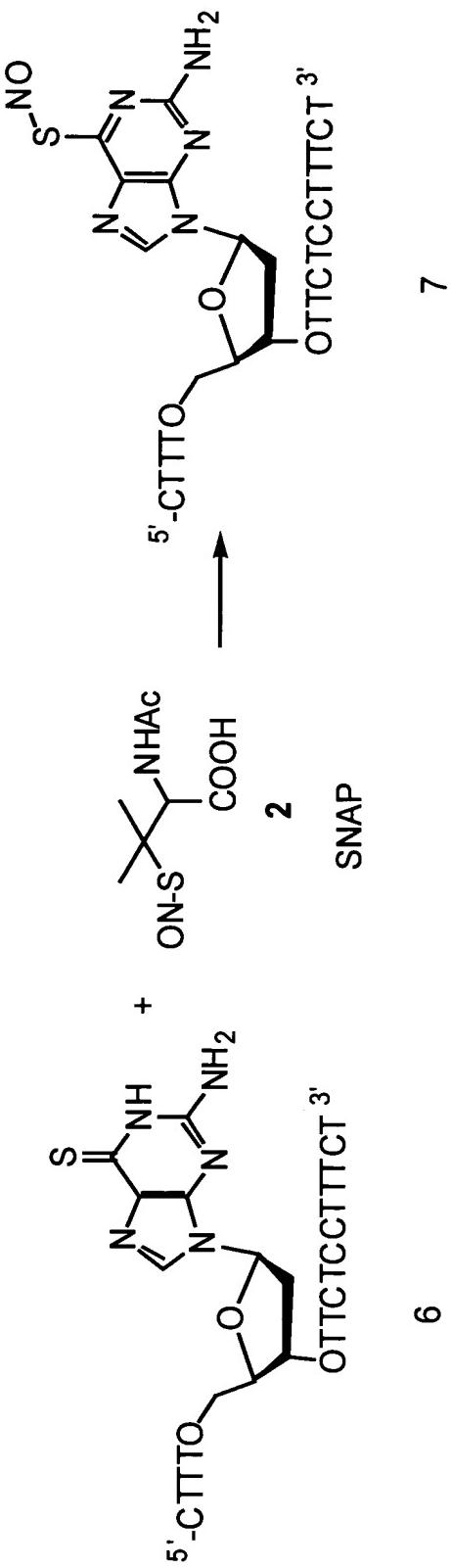
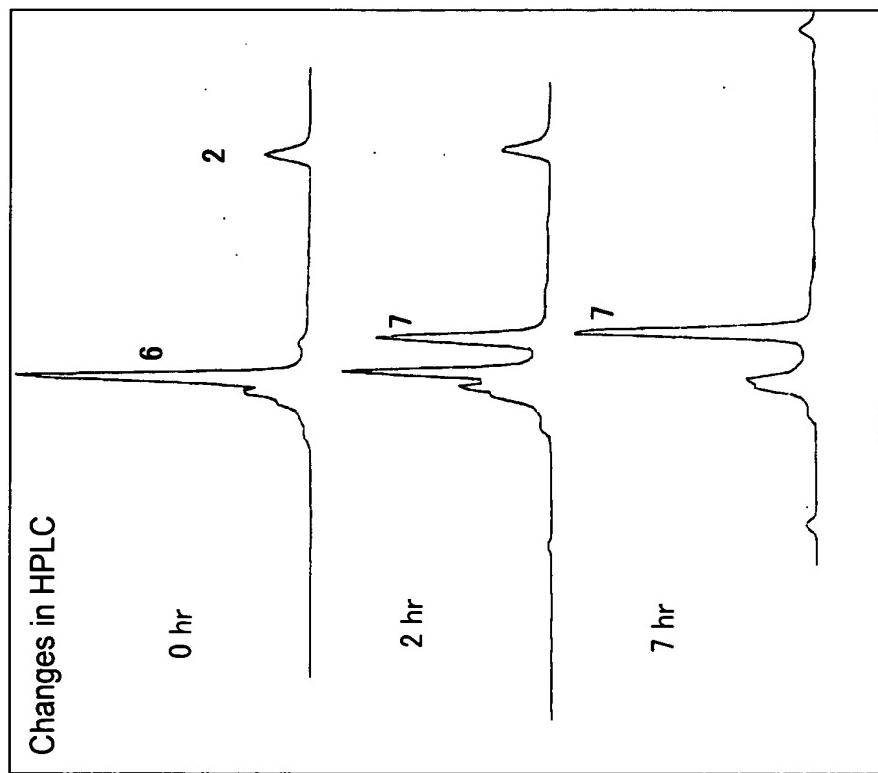


Figure 6



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Figure 7

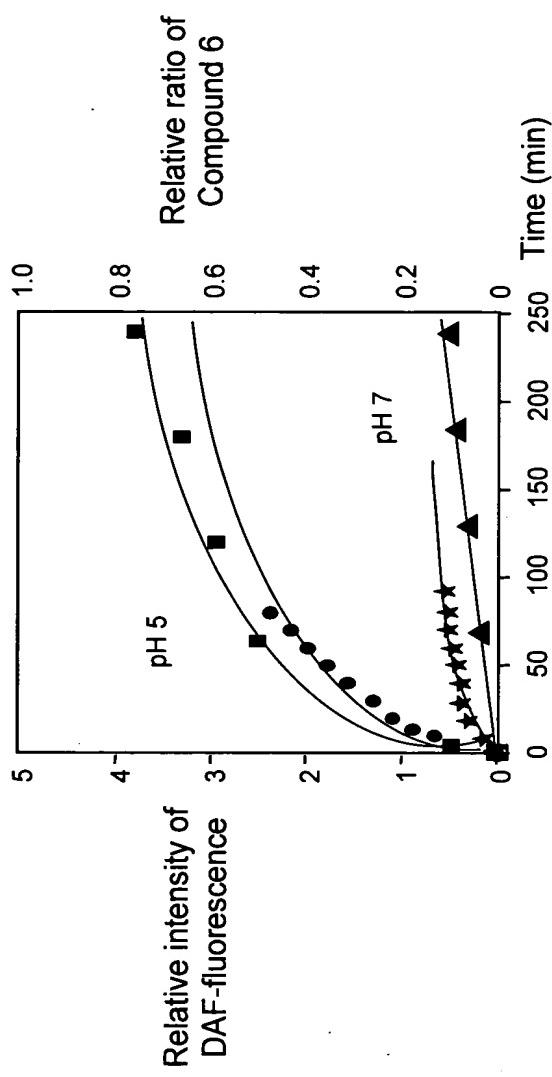
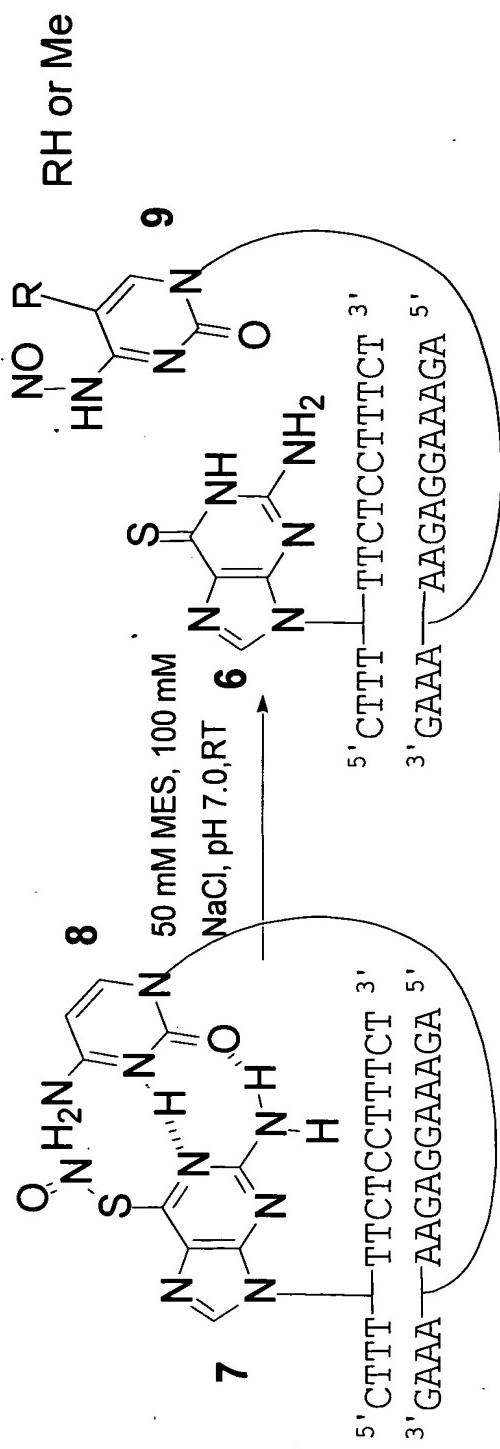


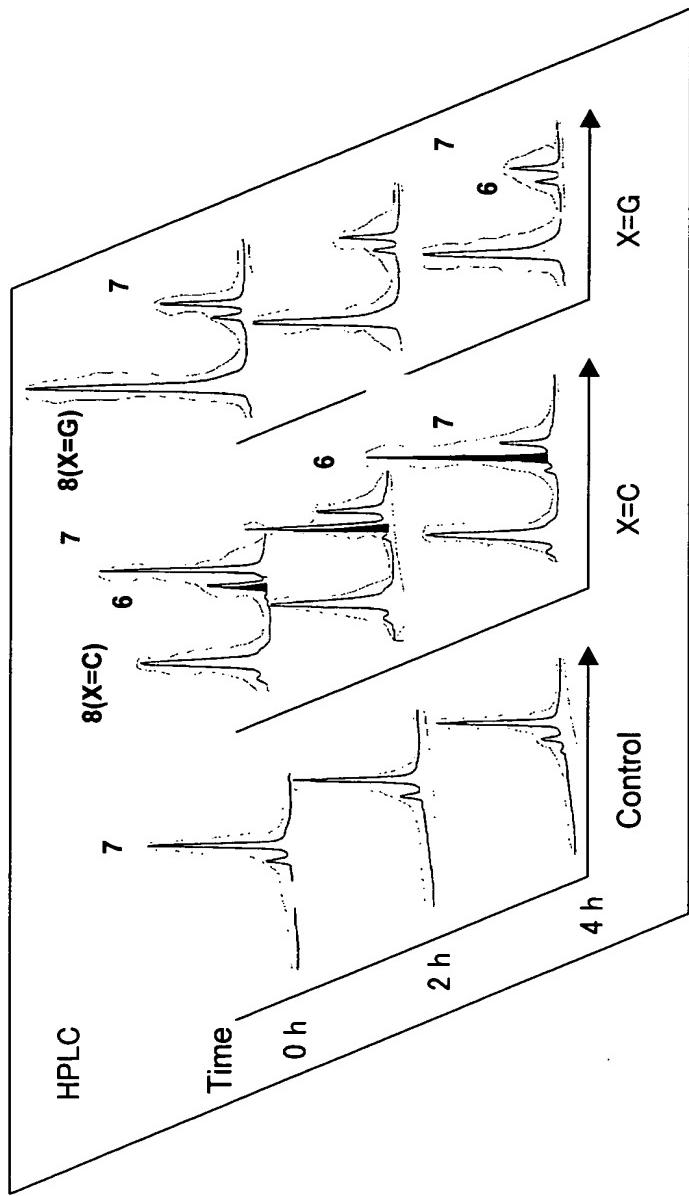
Figure 8



- 8:** $^3' \text{GAAA-X-AAGAGGAAAGA } 5'$
- 10:** $^3' \text{GAAA-T-CAGAGGAAAGA } 5'$
- 11:** $^3' \text{GAAA-T-ACAGGGAAAGA } 5'$
- 12:** $^3' \text{GAAA-T-TAACAGGAAAGA } 5'$
- 13:** Glutathione

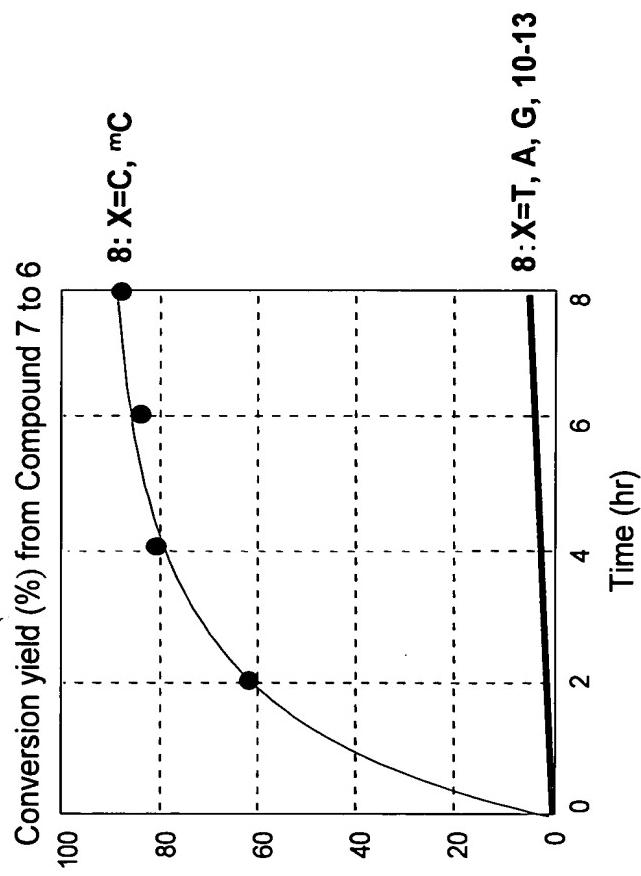
$X=C, {}^mC, T, A, G$
 $({}^mC=5\text{-methylcytidine})$

Figure 9



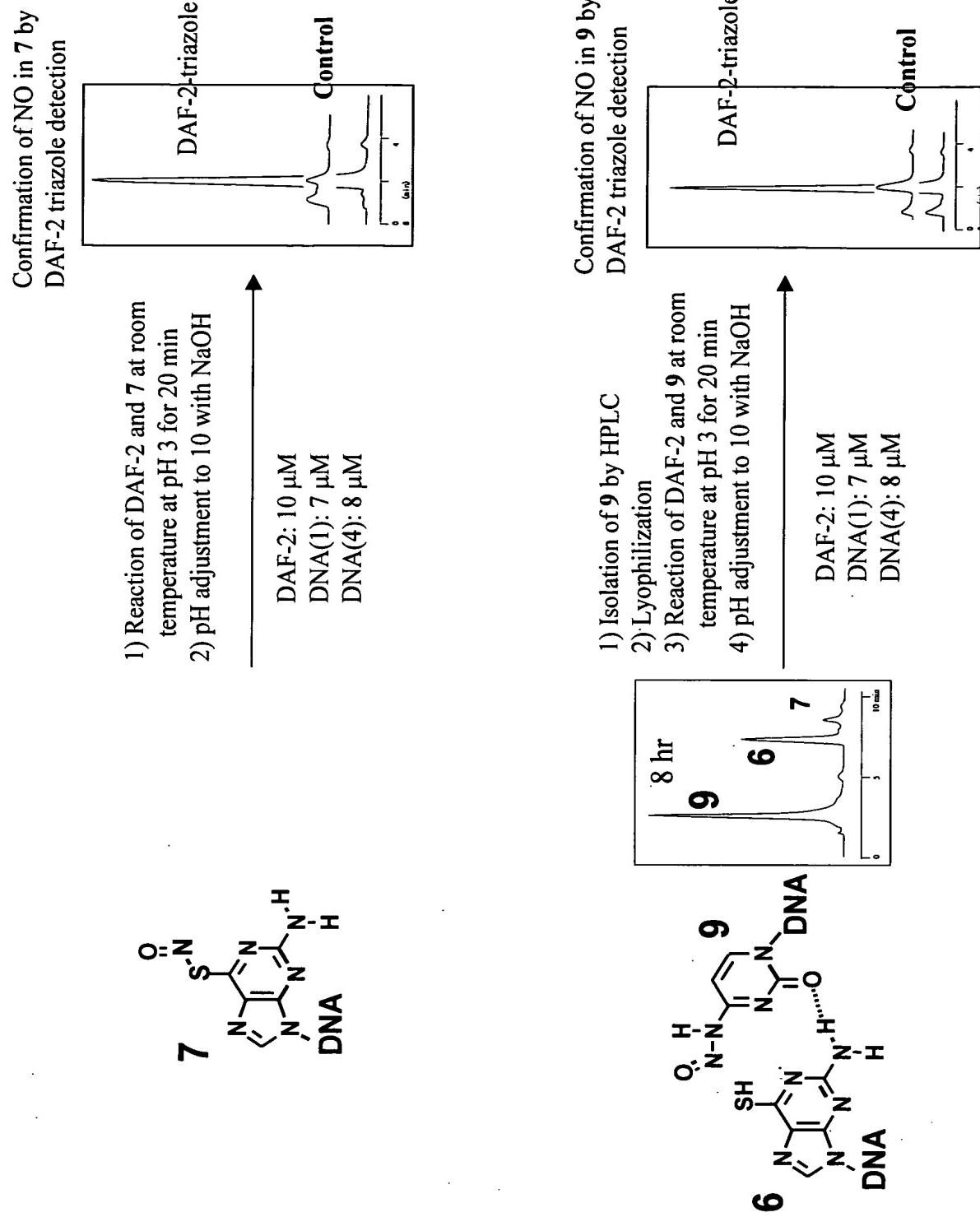
10/554158

Figure 10



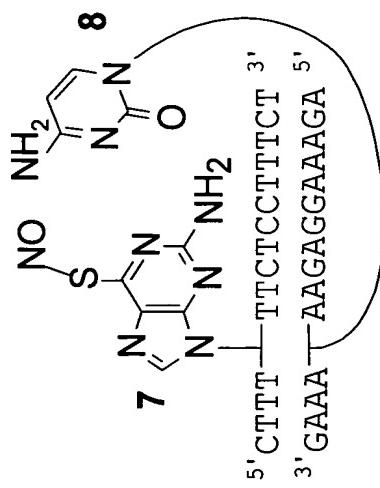
10/554158

Figure 11

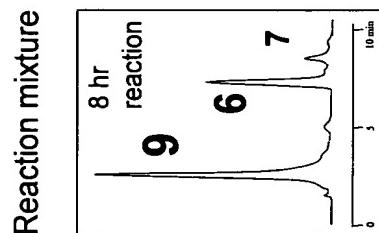


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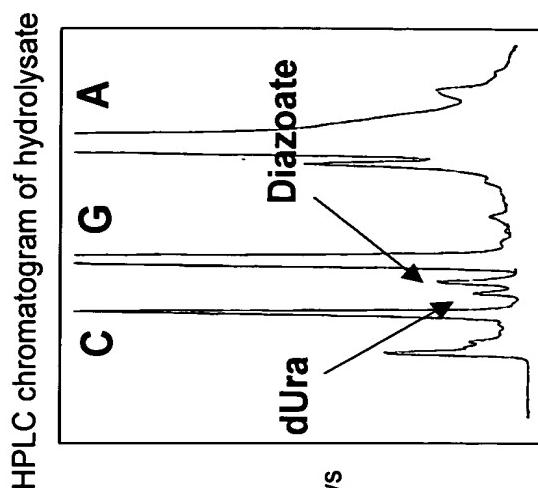
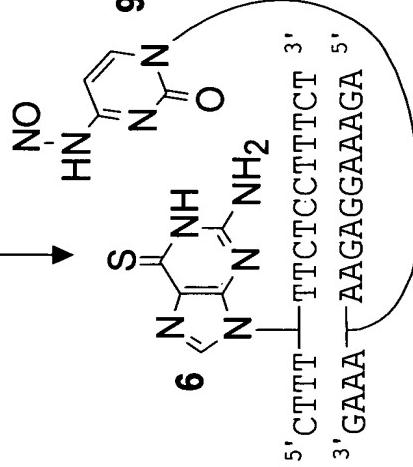
Figure 12



pH 7, 8 hours



Reaction mixture



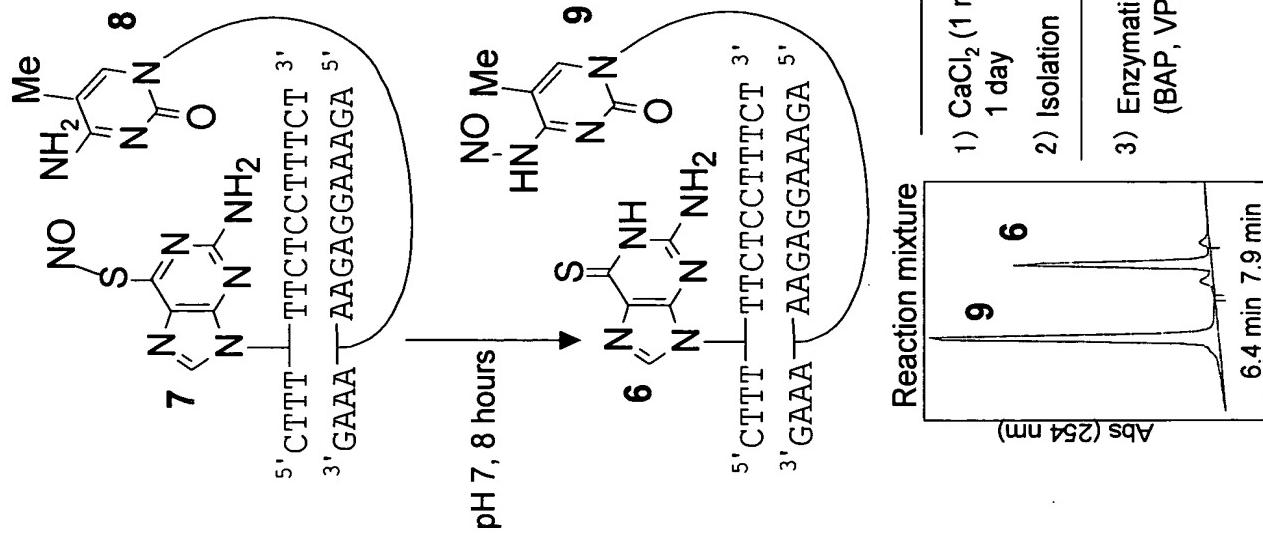
HPLC chromatogram of hydrolysate

- 1) Treatment at pH 5 for 4 days
 2) Isolation of 9
 3) Enzymatic digestion (BAP, VPDE)
 4) Analysis by HPLC

NO-transfer reaction product with cytidine

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Figure 13



NO transfer reaction product with 5-methylcytidine

* represents 5-methylcytidine diazoate form